City of Kirkland

Request for Proposal

Wireless Services Everest Park and Houghton Beach Park

Job # 48-14-IT

Issue Date: November 10, 2014

Due Date: 4 p.m. (Pacific Time), December 5, 2014

REQUEST FOR PROPOSALS

Notice is hereby given that proposals will be received by the City of Kirkland, Washington, for:

Wireless Services – Everest Park and Houghton Beach Park

File with Purchasing, Finance Department, 123 5th Ave, Kirkland WA, 98033 as follows:

Proposals received later than **4:00 p.m., December 5, 2014 will not** be considered.

A copy of this Request for Proposal (RFP) may be obtained from City's web site at http://www.kirklandwa.gov (this link will take you to the Business Opportunities page) or by contacting the RFP Coordinator, Donna Gaw at dgaw@kirklandwa.gov.

The City of Kirkland reserves the right to reject any and all proposals and to waive irregularities and informalities in the submittal and evaluation process. This RFP does not obligate the City to pay any costs incurred by respondents in the preparation and submission of a proposal. Furthermore, the RFP does not obligate the City to accept or contract for any expressed or implied services.

The City of Kirkland assures that no person shall, on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. The City of Kirkland further assures that every effort will be made to ensure non-discrimination in all of its programs and activities, whether those programs are federally funded or not.

Dated this 10th Day of November, 2014

Barry L. Scott, C.P.M. Purchasing Agent

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OBJECTIVE OF THIS RFP

The purpose of this RFP is to solicit proposals from vendors qualified to assist in the implementation of wireless services in Everest Park (500 8th Street South, Kirkland, WA) and Houghton Beach Park (5811 Lake Washington Blvd., Kirkland, WA) and installation of the fiber optic cable necessary to connect the wireless services in these parks back to the City's fiber optic network. We will consider proposals from single vendors or from a team of vendors where one vendor is designated to serve as the project lead. The ideal vendor(s) will have experience in implementing outdoor wireless network services and installing fiber optic cable solutions in businesses and/or local government agencies of similar size to Kirkland, and in larger agencies.

King County prevailing wage rates will apply to all installation labor.

BACKGROUND

THE CITY OF KIRKLAND

The City of Kirkland is located just across Lake Washington from Seattle, Washington, and just north of Bellevue with some contiguous borders. Kirkland is the second largest city on the eastside of Lake Washington, and the twelfth largest in the State of Washington. Our population is approximately 81,000. A full <u>community profile</u> can be found on our website.

REQUESTED SERVICES

We are looking for a vendor or partnered set of vendors to provide the City with:

- Equipment pricing and implementation services for installing and configuring Cisco wireless access points in Kirkland's Everest and Houghton Beach Parks, and the associated controller (see Attachment E for Equipment Specifications and Technical Requirements);
- Installing the fiber optic cable that will connect the two parks back to the City's fiber optic network (see Attachment F for routes, additional information will be provided in the scheduled walk through, see Procurement Schedule section in this document);
- Puget Sound Energy pole attachment agreements; and
- Other required City permits (details will be discussed with successful vendor).

Note: The successful candidate will be required to sign the City's Non-Disclosure Agreement (see Attachment B) and the IT Vendor Security Policy (see Attachment C).

DELIVERABLES

The following deliverables are to be provided by the vendor. Additional deliverables may be identified during the initial meetings between the vendor and the City.

- A fully installed, configured and tested wireless mesh network in Kirkland's
 Everest and Houghton Beach Parks per the design described in Attachment F.
 Successful vendor will closely coordinate with City Network staff to ensure City
 standards are followed for installation, configuration and testing.
- A fully installed fiber optic cable connection from each park noted in the abovebullet back to the City's existing fiber optic network that brings the network traffic back to Kirkland City Hall per the design described in Attachment G.
- A document detailing the wireless network setup and configuration.
- A set of as-builts for the installed fiber, including, but not limited to, a map showing the route and pole attachment agreements with Puget Sound Energy.

RFP OFFICIAL CONTACT

Upon release of this RFP, all vendor communications concerning the overall RFP should be directed to the RFP Coordinator listed below. Unauthorized contact regarding this RFP with other City employees may result in disqualification. Any oral communications will be considered unofficial and non-binding on the City. Vendors should rely only on written statements issued by the RFP Coordinator.

Name: RFP Coordinator

Donna Gaw

Address: City of Kirkland

Information Technology

123 5th Avenue

Kirkland, Washington 98033

Telephone: 425-587-3080

E-mail: dgaw@kirklandwa.gov

PROCUREMENT SCHEDULE

The procurement schedule for this project is as follows:

Note: The City reserves the right to adjust this schedule as necessary.

Milestone	Date
Release RFP to Vendors	November 10, 2014
Vendor Walk-through onsite at Everest Park	11/20/14 at 9:00 am
Vendor Questions (if any) Due	11/24/14
Answers to RFP Questions Released	11/25/14
Proposal Responses Due	12/5/14
Finalists selected	12/9/14
Vendor interviews (please reserve this	12/12/14
date)	
Vendor Selection	12/16/14
Contract Negotiations Complete	To be determined
Contract Signed	To be determined
Work Begins	To be determined
Network Evaluation Complete	To be determined
Final Acceptance	Before April 1, 2015

LETTER OF INTENT

Vendors wishing to submit proposals are encouraged to provide a written letter of intent to propose by November 24, 2014. An email attachment sent to dgaw@kirklandwa.gov is fine. The letter must identify the name, address, phone, fax number, and e-mail address of the person who will serve as the key contact for all correspondence regarding this RFP.

A letter of intent will help the City provide interested vendors with a list of any questions received and the City's answers to those questions. Those providing a letter of intent will also be notified of any addenda that are issued. If a letter of intent is not submitted, it will be the vendor's responsibility to monitor the website to get answers to any questions.

A list of all vendors submitting a letter of intent will be available upon request.

Those who choose not to provide a letter of intent will be responsible for monitoring the City's purchasing webpage for any addenda issued for this RFP.

QUESTIONS REGARDING THE RFP

Vendors who request a clarification of the RFP requirements must submit written questions to the RFP Coordinator by 4 p.m. (PST) on November 24, 2014. Written copies of all questions and answers will be provided to all vendors who have submitted letters of intent. An email attachment sent to dgaw@kirklandwa.gov is fine. Responses to all questions submitted by this date will be emailed to vendors who submitted a letter of intent by 12:00 p.m. on December 5, 2014.

COOPERATIVE PURCHASING

RCW 39.34 allows cooperative purchasing between public agencies (including political subdivisions) in the State of Washington. Public agencies which have filed an Intergovernmental Cooperative Purchasing Agreement with the City of Kirkland may purchase from City of Kirkland contracts, provided that the supplier agrees to participate. The City of Kirkland does not accept any responsibility for purchase orders issued by other public agencies.

PROPOSAL PREPARATION

General Information

It is important that all bidders read this section carefully. Failure to comply with these instructions may result in your proposal being removed from consideration by the City.

Vendors must prepare proposals using a word processor and electronic versions of the forms provided in Chapter II of this RFP. The City of Kirkland is using a "forms-based" approach to this procurement. This will allow all the bids received to be compared in a meaningful (i.e., "apples-to-apples") way. contains, in addition to the General RFP Information, a series of Response Forms.

PROPOSAL SUBMISSION

The following provides specific instructions for submitting your sealed proposal.

Due Date:	Sealed Proposals must be received by the Purchasing Agent no
	lator than Docombor E. 2014 at 4 n m. (Pacific Time) Lato

later than December 5 2014 at 4 p.m. (Pacific Time). Late proposals will not be accepted nor will additional time be granted to any vendor unless it is also granted to all vendors. Proposals sent by email must be time stamped as received by Kirkland's system by 4:00 p.m. Emailed proposals must be in either MS Word or PDF **format.** All proposals and accompanying documentation will become the property of the City and will not be returned.

Number of Copies:

An electronic copy of the vendor's proposal, in its entirety, must be received as specified above.

The City will **not** accept facsimile.

City of Kirkland Address for Submission:

Attn: Purchasing Agent

48-14-IT 123 5th Ave

Kirkland, WA 98033

Email: purchasing@kirklandwa.gov

EVALUATION PROCEDURES

The RFP coordinator and other staff will evaluate the submitted proposals.

The evaluators will consider how well the vendor's proposed solution meets the needs of the City as described in the vendor's response to each requirement and form. It is important that the responses be clear and complete so that the evaluators can adequately understand all aspects of the proposal. The evaluation process is not designed to simply award the contract to the lowest cost vendor. Rather, it is intended to help the City select the vendor with the best combination of attributes, including price, based on the evaluation factors. The City reserves the right to require that a subset of finalist vendors make a presentation to a selection team.

Chapter II: Required Proposal Response Forms

The proposal must provide a summary of the firm's qualifications to perform the duties outlined in the requested services section. This chapter contains forms vendors must complete to submit their proposals. Vendors must complete all the forms in this chapter as well as other requests for information contained herein. The following forms are included:

- 1) Cover Letter
- 2) Proposal Summary
- 3) Acceptance of Terms and Conditions
- 4) General Vendor Information
- 5) Project Staff List
- 6) Key Project Staff Background Information
- 7) Customer Reference
- 8) Task Area Descriptions
- 9) Project Schedule and Workplan

PROPOSAL PREPARATION INSTRUCTIONS

To prepare your proposal, follow these instructions:

- 1. Open the electronic version of the forms of this RFP in your word processing application (Microsoft Word 2003 or later is highly recommended).
- 2. Using your word processing application's copy and paste commands, copy sections and forms as necessary and paste them into a new file. Save the new file.
- 3. Complete all of the forms in your word processing and spreadsheet applications. Also, please create a table of contents with page numbers. Delete instructions (i.e., materials contained in brackets) from each form.
- 4. When your proposal is finished, refer to the proposal submission instructions in this document.

FORM 1: COVER LETTER

[Use this space to compose a cover letter for your proposal. All proposals must include a cover letter signed by a duly constituted official legally authorized to bind the applicant to both its proposal and cost schedule. NOTE: The cover letter is not intended to be a summary of the proposal itself; this is accomplished in Form 2.

The cover letter must contain the following statements and information:

- "Proposal may be released in total as public information in accordance with the requirements of the laws covering same." (Any proprietary information must be clearly marked.)
- 2. "Proposal and cost schedule shall be valid and binding for ONE HUNDRED EIGHTY (180) days following proposal due date and will become part of the contract that is negotiated with the City."
- 3. Company name, address, and telephone number of the firm submitting the proposal.
- 4. Name, title, address, e-mail address, and telephone number of the person or persons to contact who are authorized to represent the firm and to whom correspondence should be directed.
- 5. Proposals must state the proposer's federal and state taxpayer identification numbers.
- 6. Please complete and attach the following documents from the Attachments section of this RFP:
 - Non-Collusion Certificate
 - Non-Disclosure Agreement

[TEXT WITHIN THE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

FORM 2: PROPOSAL SUMMARY

[Use this form to summarize your proposal and your firm's qualifications. Additionally, you may use this form at your discretion to articulate why your firm is pursuing this work and how it is uniquely qualified to perform it.

Chapter II: Required Proposal Response Forms

Your proposal summary is not to exceed two pages.

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THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED AND REPLACED BY YOUR PROPOSAL SUMMARY.]

Chapter II: Required Proposal Response Forms

[Use this space as needed for page 2 of your proposal summary.]				

FORM 3: ACCEPTANCE OF TERMS AND CONDITIONS

[Use this form to indicate exceptions that your firm takes to any terms and conditions listed in this RFP, including the Appendices and Attachments. Proposals which take exception to the specifications, terms, or conditions of this RFP or offer substitutions shall explicitly state the exception(s), reasons(s) therefore, and language substitute(s) (if any) in this section of the proposal response. Failure to take exception(s) shall mean that the proposer accepts the conditions, terms, and specifications of the RFP.

If your firm takes no exception to the specifications, terms, and conditions of this RFP, please indicate so.

THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED AND REPLACED BY YOUR RESPONSE.]

Signed,	
Ву:	
Title	Date
For:	

FORM 4: GENERAL VENDOR INFORMATION

[Use this form to provide information about your firm.

THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

1. Please complete the following table:

Name of parent company	
Length of time in business	
Length of time in business of providing proposed services	
Gross revenue for the prior fiscal year (in US dollars)	
Percentage of gross revenue generated by proposed	
services	
Total number of clients	
Total number of clients in the proposed service area	
Number of public sector clients	
Number of full-time personnel in:	
◆ Consulting	
◆ Telecommunications	
◆ Sales, marketing, and administrative support	
◆ Other (please note relevant staff)	

- 2. Where is your headquarters located? Field offices?
- 3. Which office would service this account?

Chapter II: Required Proposal Response Forms

[form 4 continued...]

4. In the following table, please list credit references that can verify the financial standing of your company. Additionally, attach the most recent audited financial statement or annual report for your company.

Institution	Address	Phone Number

5. If the vendor has had a contract terminated for default during the past five years, all such incidents must be described. Termination for default is defined as notice to stop performance due to the vendor's nonperformance or poor performance; and the issue was either (a) not litigated or (b) litigated, and such litigation determined the vendor to be in default.

In the space provided, submit full details of all terminations for default experienced by the vendor during the past five years, including the other party's name, address, and telephone number. Present the vendor's position on the matter. The City will evaluate the facts and may, at its sole discretion, reject the vendor's proposal if the facts discovered indicate that completion of a contract resulting from this RFP may be jeopardized by selection of the vendor.

If no such terminations for default have been experienced by the vendor in the past five years, declare so in the space provided.

If the vendor has had a contract terminated for convenience, nonperformance, non-allocation of funds, or any other reason which termination occurred before completion of the contract during the past five years, describe fully all such terminations, including the name, address, and telephone number of the other contracting party.

A vendor response that indicates that the requested information will only be provided if and when the vendor is selected as the apparently successful vendor is not acceptable. Restricting the vendor response to include only legal action resulting from terminations for default is not acceptable.

Chapter II: Required Proposal Response Forms

[Please use this space to respond to Question 5 of Form 4.	Your response may take
as many pages as needed to fully answer the question.	TEXT WITHIN THESE
BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]	

FORM 5: PROJECT STAFF LIST

[Please complete the following table to identify the proposed project staff (including subcontractors) who will assist the City with this project. Indicate the percent of time each staff member will be dedicated to the project and each member's years of experience in telecommunications. Add additional lines as necessary for each instance of the list. Use your word processing application's copy and paste functions to create additional copies of this table as necessary. TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE]

Staff member name	Title	Percent of staff member's time dedicated to project	Number of years in IT

FORM 6: KEY PROJECT STAFF BACKGROUND INFORMATION

[Complete the following table for each of the key project staff members. Use your word processor's copy and paste commands to create additional copies of this table as necessary. Please allow one page for each table. At a minimum, key staff must include your proposed project manager and key contributors to this project. TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

Vendor Name	
Staff member name	
Position in the company	
Length of time in position	
Length of time at company	
Project position and responsibilities	
Education	
Previous work experience	
Technical skills and qualifications for	
the project position. Include skills	
and experience with network	
management and automation, plus	
any other skills that might be	
considered relevant.	

FORM 7: CUSTOMER REFERENCE FORM

[Using the tables below, please list five private sector clients and all public sector clients for whom you have provided <fill in the blank> services or other services relevant to this RFP over the past two years. Use your word processor's copy and paste functions to create additional tables as needed.]

Customer/client nar	ne				
Reference name					
Title					
Phone number					
Mailing address					
Fax number					
Url where plan cop					
available for view	(if				
applicable)					
Customer Size	Ser	vice Description	Start Date	End Date	Contract
					amount

Chapter II: Required Proposal Response Forms

FORM 8: TASK AREA DESCRIPTIONS

[Describe your overall approach to the following task areas. Your response to this form should not exceed three pages. TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

FORM 9: PROJECT SCHEDULE AND WORKPLAN

[Provide a detailed project implementation plan that includes:

- A Gantt chart showing beginning and end dates of all tasks (the actual project start date will be determined during contract negotiations)
- A table listing vendor staff assignments and proposed labor hours for all tasks
- A brief description of each task and its work products
- A description of each proposed deliverable

Insert pages as needed to allow space for your Gantt chart and workplan. TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

Gantt Chart

[Use this section to include your Gantt chart showing beginning and end dates of all tasks.

THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

Vendor Staff Assignments/Hours

[Use this section to include a table of vendor staff assignments and proposed labor hours for all tasks. Signify if staff assigned is a designated individual or FTE equivalent.

THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

Task Descriptions

[Use this section to include brief descriptions of all tasks, milestones and associated work products.

THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

Deliverables

[Use this section to include brief descriptions of all project deliverables.

THE TEXT WITHIN THESE BRACKETS IS TO BE DELETED IN YOUR RESPONSE.]

FEE SCHEDULE

The Proposal must contain a fee schedule that includes estimated hours, rates, and overall price, including equipment.

Appendices

RFP AMENDMENTS

The City reserves the right to change the schedule or issue amendments to the RFP at any time. The City also reserves the right to cancel or reissue the RFP.

VENDOR'S COST TO DEVELOP PROPOSAL

Costs for developing proposals in response to the RFP are entirely the obligation of the vendor and shall not be chargeable in any manner to the City.

WITHDRAWAL OF PROPOSALS

Proposals may be withdrawn at any time prior to the submission time specified in this RFP, provided notification is received in writing. Proposals cannot be changed or withdrawn after the time designated for receipt.

REJECTION OF PROPOSALS – WAIVER OF INFORMALITIES OR IRREGULARITIES

The City reserves the right to reject any or all proposals, to waive any minor informalities or irregularities contained in any proposal, and to accept any proposal deemed to be in the best interest of the City.

PROPOSAL VAILIDITY PERIOD

Submission of the proposal will signify the vendor's agreement that its proposal and the content thereof are valid for 180 days following the submission deadline and will become part of the contract that is negotiated between the City and the successful vendor.

CITY TAXATION

The contractor awarded said contract will be required to purchase a City of Kirkland Business License.

PUBLIC RECORDS

"Under Washington state law, the documents (including but not limited to written, printed, graphic, electronic, photographic or voice mail materials and/or transcriptions, recordings or reproductions thereof) submitted in response to this request for proposals (the "documents") become a public record upon submission to the City, subject to mandatory disclosure upon request by any person, unless the documents are exempted from public disclosure by a specific provision of law. If the City receives a request for inspection or copying of any such documents provided by a vendor in response to this RFP, it will promptly notify the vendor at the address given in response to this RFP that it has received such a request. Such notice will inform the vendor of the date the City intends to disclose the documents requested and affording the vendor a reasonable opportunity to obtain a court order prohibiting or conditioning the release of the documents. The City assumes no contractual obligation to enforce any exemption."

ACQUISITION AUTHORITY

This RFP and acquisition are authorized pursuant to RCW 39.04.270.

CONTRACT AWARD AND EXECUTION

- ◆ The City reserves the right to make an award without further discussion of the proposal submitted. Therefore, the proposal should be initially submitted on the most favorable terms the vendors can offer. It is understood that the proposal will become a part of the official file on this matter without obligation to the City. Submitted proposal are subject to negotiation.
- ◆ The general conditions and specifications of the RFP and as proposed by the City and the successful vendor's response, as amended by agreements between the City and the vendor, will become part of the contract documents. Additionally, the City will verify vendor representations that appear in the proposal. Failure of the vendor's products to meet the mandatory specifications may result in elimination of the vendor from competition or in contract cancellation or termination.
- ◆ The vendor selected as the apparently successful vendor will be expected to enter into a contract with the City using the City's Professional Services Agreement (see Attachment D).
- If the selected vendor fails to sign the contract within five (5) business days of delivery of the final contract, the City may elect to cancel the award and award the contract to the next-highest-ranked vendor.
- No cost chargeable to the proposed contract may be incurred before receipt of a fully executed contract.

<u>DEFENSE, INDEMNIFICATION, HOLD HARMLESS AND INSURANCE REQUIREMENTS</u>

In addition to other standard contractual terms the City will need, the City will require the selected vendor to comply with the defense, indemnification, hold harmless and insurance requirements as outlined below:

Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

The vendor shall procure and maintain, for the duration of this Agreement, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be paid by the Contractor. Insurance shall meet or exceed the following unless otherwise approved by the City.

A. Minimum Scope of Insurance

- 1. Insurance Services Office Commercial General Liability coverage ("occurrence" form CG0001) (Ed.10/1/93), or, Insurance Services Office form number GL 0002 (Ed. 1/73) covering Comprehensive General Liability and Insurance Services Office form number GL 0404 (Ed. 1/81) covering Broad Form Comprehensive General Liability.
- 2. Insurance Services Office form number CA 0001 (Ed. 12/93), covering Automobile Liability code 1, "any auto", for activities involving other than incidental personal auto usage.
- 3. Workers' Compensation coverage as required by the Industrial Insurance Laws of the State of Washington.
- 4. Consultant's Errors and Omissions or Professional Liability applying to all professional activities performed under the contract.

B. Minimum Levels of Insurance

1. Comprehensive or Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.

- 2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- 3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
- 4. Consultant's Errors or Omissions or Professional Liability: \$1,000,000 per occurrence and as an annual aggregate.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City. In the event the deductibles or self-insured retentions are not acceptable to the City, the City reserves the right to negotiate with the Contractor for changes in coverage deductibles or self-insured retentions; or alternatively, require the Contractor to provide evidence of other security guaranteeing payment of losses and related investigations, claim administration and defense expenses.

D. Other Provisions

Wherever possible, the policies are to contain, or be endorsed to contain, the following provisions:

- 1. General or Commercial Liability and Automobile Liability Coverages
 - a. The City, its officials, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees or volunteers.
 - b. The Contractor's insurance shall be primary insurance as respects the City, its officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees or volunteers.
 - d. Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- 2. All Coverages

Each insurance policy required by this clause shall state that coverage shall not be canceled by either party except after thirty (30) days prior written notice has been given to the City.

E. Acceptability of Insurers

Insurance is to be placed with insurers with a current Bests' rating of A:XII, or with an insurer acceptable to the City.

F. Verification of Coverage

Contractor shall furnish the City with certificates of insurance affecting coverage required by this clause. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf and shall name the City as an "additional insured" except for coverages identified in A.4. above. The certificates are to be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

G. Subcontractors

Contractor shall include all subcontractors as insureds under its policies or shall require subcontractors to provide their own coverage. All coverages for subcontractors shall be subject to all of the requirements stated herein.

H. Asbestos or Hazardous Materials Abatement Work

If Asbestos abatement or hazardous materials work is performed, Contractor shall review coverage with the City's Risk Manager and provide scope and limits of coverage that are appropriate for the scope of work. No asbestos abatement work will be performed until coverage is approved by the Risk Manager.

EQUAL OPPORTUNITY COMPLIANCE

The City is an equal opportunity employer and requires all Proposers to comply with policies and regulations concerning equal opportunity.

The Proposer, in the performance of this Agreement, agrees not to discriminate in its employment because of the employee's or applicant's race, religion, national origin, ancestry, sex, sexual orientation, age, or physical handicap.

OTHER COMPLIANCE REQUIREMENTS

In addition to nondiscrimination and equal opportunity compliance requirements previously listed, the Proposer awarded a contract shall comply with federal, state and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, protection of public and employee safety and health; environmental protection; waste reduction and recycling; the protection of natural resources; permits; fees; taxes; and similar subjects.

OWNERSHIP OF DOCUMENTS

Any reports, studies, conclusions, and summaries prepared by the Proposer shall become the property of the City.

CONFIDENTIALITY OF INFORMATION

All information and data furnished to the Proposer by the City, and all other documents to which the Proposer's employees have access during the term of the contract, shall be treated as confidential to the City. Any oral or written disclosure to unauthorized individuals is prohibited.

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ATTACHMENTS

Attachment A: Non-Collusion Certificate

NON-COLLUSION CERTIFICATE
STATE OF)
COUNTY OF)
The undersigned, being duly sworn, deposes and says that the person, firm, association, co-partnership or corporation herein named, has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in the preparation and submission of a proposal to the City of Kirkland for consideration in the award of a contract on the improvement described as follows:
Wireless Services — Everest Park and Houghton Beach Park
(Name of Firm)
By: ————————————————————————————————————
Title
Sworn to before me thisday of
Notary Public

CORPORATE SEAL:

Attachment B: Non-Disclosure Agreement



NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement ("the Agreement") is made this day of, 201_by and between the City of Kirkland, a municipal corporation of the State of Washington (the "City"), and, a corporation ("the Vendor").	_,
Whereas, the Vendor <is a="" candidate="" proposal="" submit="" successful="" the="" to="" wishes="">for the <project name="">; and</project></is>	
Whereas, the Vendor will need to review confidential information ("the Confidential Information") belonging to the City in order to be able to <pre>prepare</pre> its proposal/complete this project>, which the City does not want disclosed; and	

Whereas, in consideration for being allowed to see the Confidential Information so that it can prepare a proposal, the sufficiency of such consideration being hereby acknowledged, Vendor is willing to enter into this Non-Disclosure Agreement,

Now therefore, as evidenced by their signatures below, the parties hereby agree as follows:

- 1. The Vendor shall maintain and protect the confidentiality of the Confidential Information, the Vendor shall not disclose the Confidential Information to any person or entity and shall not challenge, infringe or permit or assist any other person or entity to disclose the Confidential Information or challenge or infringe any of the City's license rights, trade secrets, copyrights, trademarks or other rights respecting the Confidential Information.
- 2. Except pursuant to a written agreement between the parties, the Vendor shall not directly or indirectly, i) provide, make, use or sell, or permit or assist any other person or entity to provide, make, use or sell any services, devices or products incorporating any protected feature embodied in any of the Confidential Information; ii) apply for or seek to register, or otherwise attempt to create, establish or protect any patents, copyrights or trademarks with respect to any of the Confidential Information; or iii) use any name used by the other party, whether or not subject to trademark protection, or any confusingly similar name.
- 3. The Vendor shall not disclose the Confidential Information except to those persons employed by the Vendor, or its affiliates or subsidiaries, who have reasonable need to review the Confidential Information under the terms of this Agreement.
- 4. Vendor shall not make any copies, drawings, diagrams, facsimiles, photographs or other representations of any of the Confidential Information.
- 5. Upon request by the City, Vendor shall immediately return any Confidential Information in its possession, including all copies thereof.

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- 6. Notwithstanding other provisions of this Agreement, the Agreement does not restrict the Vendor with respect to the use of information that is already legally in its possession, that is available to the Vendor from other sources without violating this Agreement or the intellectual property rights of the City or that is in the public domain. Notwithstanding other provisions of this Agreement, this Agreement also shall not restrict the Vendor from providing, making, using or selling services, devices or other products so long as the Vendor does not breach this Agreement, violate the City's intellectual property rights or utilize any of the Confidential Information.
- 7. The covenants in this Agreement may be enforced a) by temporary, preliminary or permanent injunction without the necessity of a bond or b) by specific performance of this Agreement. Such relief shall be in addition to and not in place of any other remedies, including but not limited to damages.
- 8. In the event of a suit or other action to enforce this Agreement, the substantially prevailing party shall be entitled to reasonable attorneys' fees and the expenses of litigation, including attorneys' fees, and expenses incurred to enforce this Agreement on any appeal.
- 9. The Agreement shall be governed by and construed in accordance with Washington law. The King County Superior Court or the United States District Court for the Western District of Washington at Seattle (if federal law is applicable) shall have the exclusive subject-matter jurisdiction of matters arising under this Agreement, shall have personal jurisdiction over the parties and shall constitute proper venue for any litigation relating to this Agreement.
- 10. For purposes of this Agreement, all covenants of the Vendor shall likewise bind the officers, directors, employees, agents, and independent contractors of the Vendor, as well as any direct or indirect parent corporation of the Vendor, direct or indirect subsidiary corporations of the Vendor and any other person or entity affiliated with or related to the Vendor or to any of the foregoing persons or entities. The Vendor shall be liable to the City for conduct of any of the foregoing persons or entities in violation of this Agreement to the same extent as if said conduct were by the Vendor.
- 11. The Vendor shall not directly or indirectly permit or assist any person or entity to take any action which the Vendor would be barred by this Agreement from taking directly.
- 12. This Agreement shall bind and inure to the benefit of the heirs, successors and assigns of the parties.

IN WITNESS WHEREOF, the parties have duly executed this Agreement on the day and year first written above.

CITY OF KIRKLAND	
	<company name=""></company>
Ву:	Ву:
Its:	Its:

Attachment C: IT Vendor Security Policy



City of Kirkland IT Vendor Security Policy

Scope: This policy applies to all vendors who do any form of work with the City of Kirkland that requires them to log into and utilize networked city systems. This is regardless of who the vendor is and which department they are working for or with. It also applies to staff with other municipal, county, state or federal entities.

Provision: When possible, this policy should be an addendum to existing contracts that require access to City of Kirkland networked systems. It may be signed separately when necessary.

Duration: This policy applies from the time a vendor signs its contract with the city through project completion or support contract termination.

- Vendors with access to City data or systems shall provide their services in manner consistent with this policy and with standard security and related compliance policies such as PCI and/or HIPPA. If vendors have remote access into systems with City data, vendors shall ensure that the remote access is conducted from IT systems which have the latest security patches, anti-virus updates, and malware signatures using a secure connection (e.g. VPN).
- 2. Vendors should only expect to be provided with the minimum security levels required for the particular tasks that they are responsible for. Vendors should not anticipate an "always on" connection, and in most cases will have to request that any connection to the city's network be turned on when they need to gain access.
- 3. Except in the case of an approved security audit and with prior written permission, vendors must not test, or attempt to compromise computer or communication system security measures. Incidents involving unapproved system cracking (hacking), password cracking (guessing), file decryption, software copying, or similar unauthorized attempts to compromise security measures may be unlawful, and will be considered serious violations of City of Kirkland policy. This includes hardware or software tools that could be employed to evaluate or compromise information systems security. Examples of such tools include, but are not limited to, those that defeat software copy protection, discover secret passwords, keyloggers, identify security vulnerabilities, or decrypt encrypted files. Similarly, without this type of approval, vendors are prohibited from using "sniffers" or any other hardware or software that monitors the traffic on a network or the activity on a computer.
- 4. Vendors shall abide by the following policies for passwords:

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- a. Network login passwords must be at least 8 characters long and include at least one number and one capital letter.
- b. Passwords must be changed every 90 days.
- c. The same password cannot be re-used within twenty password changes.
- d. Passwords must not be written down or stored in systems except in encrypted applications designed to store passwords.
- e. Passwords must not be shared among vendor staff.
- f. Vendors should not use the same passwords for city and personal needs.
- g. Other password protected systems will comply with above network login password policy when technically possible.
- 5. Vendors must report all security incidences to the appropriate City of Kirkland IT personnel, including any serious security breaches on their own network during the time they have userid/password access to the City of Kirkland's network within 24 hours of identifying the security incident.
- 6. City of Kirkland IT will provide an IT point of contact for vendors. This point of contact will liaise with the vendor to ensure they are in compliance with these policies.
- 7. Vendors working on certain types of systems or with certain data will need to have formal background checks completed. This includes but is not limited to all systems that fall under the purview of the Criminal Justice Information Services policies. It is the responsibility of the City of Kirkland IT to notify vendors who need a background check.

The following signature block must be completed any time that this agreement stands alone and is not a formal addendum to a current contract.

Signature	Signature
Name	Name
Organization	Organization
Date	Date

Attachment D: Professional Services Agreement



PROFESSIONAL SERVICES AGREEMENT

Job Name and Number

WHING?	
	and, Washington, a municipal corporation ("City") and s ("Consultant"), agree and contract as follows:
I. SER	VICES BY CONSULTANT
	A. The Consultant agrees to perform the services described in Attachment to this Agreement, which attachment is incorporated herein by reference.
	B. All services and duties shall be conducted and performed diligently, completely and in accordance with professional standards of conduct and performance.
	II. COMPENSATION
	A. The total compensation to be paid to Consultant for these services shall not exceed \$, as detailed in Attachment
	B. Payment to Consultant by the City in accordance with the payment ceiling specified above shall be the total compensation for all work performed under this Agreement and supporting documents hereto as well as all subcontractors' fees and expenses, supervision, labor, supplies, materials equipment or the use thereof, reimbursable expenses, and other necessary incidentals.
	C. The Consultant shall be paid monthly on the basis of invoices submitted. Invoicing will be on the basis of percentage complete or on the basis of time, whichever is applicable in accordance with the terms of this Agreement.
	D. The City shall have the right to withhold payment to Consultant for any work not completed in a satisfactory manner until such time as Consultant modifies such work to the satisfaction of the City.
	E. Unless otherwise specified in this Agreement, any payment shall be considered timely if a warrant is mailed or is available within 45 days of the date of actual receipt by the City of an invoice conforming in all respects to the terms of this Agreement.
	III. TERMINATION OF AGREEMENT

The City or the Consultant may terminate this Agreement at any time, with or without cause, by giving ten (10) days' notice to the other in writing. In the event of termination, all finished or unfinished reports, or other material prepared by the Consultant pursuant to this Agreement, shall be provided to the City. In the event the City terminates prior to completion without cause, consultant may complete such analyses and records as may be necessary to place its files in order. Consultant shall be entitled to receive just and equitable compensation for any satisfactory work completed on the project prior to the date of termination, not to exceed the payment ceiling set forth above.

IV. OWNERSHIP OF WORK PRODUCT

- A. Ownership of the originals of any reports, data, studies, surveys, charts, maps, drawings, specifications, figures, photographs, memoranda, and any other documents which are developed, compiled or produced as a result of this Agreement, whether or not completed, shall be vested in the City. Any reuse of these materials by the City for projects or purposes other than those which fall within the scope of this contract or the project to which it relates, without written concurrence by the Consultant will be at the sole risk of the City.
- B. The City acknowledges the Consultant's plans and specifications as instruments of professional service. Nevertheless, the plans and specifications prepared under this Agreement shall become the property of the City upon completion of the work. The City agrees to hold harmless and indemnify consultant against all claims made against Consultant for damage or injury, including defense costs, arising out of any reuse of such plans and specifications by any third party without the written authorization of the Consultant.
- C. Methodology, materials, software, logic, and systems developed under this contract are the property of the Consultant and the City, and may be used as either the consultant or the City sees fit, including the right to revise or publish the same without limitation.

V. GENERAL ADMINISTRATION AND MANAGEMENT

The ______ for the City of Kirkland shall review and approve the Consultant's invoices to the City under this Agreement, shall have primary responsibility for overseeing and approving services to be performed by the Consultant, and shall coordinate all communications with the Consultant from the City.

VI. COMPLETION DATE

The estimated completion	date for th	ne Consultant's	performance o	f the services
specified in Section I is	 	•		

Consultant will diligently proceed with the work contracted for, but consultant shall not be held responsible for delays occasioned by factors beyond its control which could not reasonably have been foreseen at the time of the execution of this Agreement. If such a delay arises, Consultant shall forthwith notify the City.

VII. SUCCESSORS AND ASSIGNS

The Consultant shall not assign, transfer, convey, pledge, or otherwise dispose of this Agreement or any part of this Agreement without prior written consent of the City.

VIII. NONDISCRIMINATION

Consultant shall, in employment made possible or resulting from this Agreement, ensure that there shall be no unlawful discrimination against any employee or applicant for employment in violation of RCW 49.60.180, as currently written or hereafter amended, or other applicable law prohibiting discrimination, unless based upon a bona fide occupational qualification as provided in RCW 49.60.180 or as otherwise permitted by other applicable law. Further, no person shall be denied or subjected to discrimination in receipt of the benefit of any services or activities made possible by or resulting from this Agreement in violation of RCW 49.60.215 or other applicable law prohibiting discrimination.

IX. HOLD HARMLESS/INDEMNIFICATION

Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from its negligence or breach of any of its obligations in performance of this Agreement.

In the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

X. LIABILITY INSURANCE COVERAGE

The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the

Consultant, its agents, representatives, or employees. A failure to obtain and maintain such insurance or to file required certificates and endorsements shall be a material breach of this Agreement.

Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

A. Minimum Scope of Insurance

Consultant shall obtain insurance of the types described below:

- Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
- Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
- 3. <u>Workers' Compensation</u> coverage as required by the Industrial Insurance laws of the State of Washington.
- 4. <u>Professional Liability</u> insurance appropriate to the Consultant's profession.

B. Minimum Amounts of Insurance

Consultant shall maintain the following insurance limits:

- 1. <u>Automobile Liability</u> insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
- 2. <u>Commercial General Liability</u> insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
- 3. <u>Professional Liability</u> insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

C. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability and Commercial General Liability insurance:

 The Consultant's insurance coverage shall be primary insurance as respects the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it. The Consultant shall provide the City and all Additional Insureds for this
work with written notice of any policy cancellation, within two business
days of their receipt of such notice.

D. **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

E. Verification of Coverage

Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

F. Occurrence Basis

Any policy of required insurance shall be written on an occurrence basis.

XI. COMPLIANCE WITH LAWS/BUSINESS LICENSE

The Consultant shall comply with all applicable State, Federal, and City laws, ordinances, regulations, and codes. Consultant must obtain a City of Kirkland business license or otherwise comply with Kirkland Municipal Code Chapter 7.02.

XII. FUTURE SUPPORT

The City makes no commitment and assumes no obligations for the support of Consultant activities except as set forth in this Agreement.

XIII. INDEPENDENT CONTRACTOR

Consultant is and shall be at all times during the term of this Agreement an independent contractor and not an employee of the City. Consultant agrees that he or she is solely responsible for the payment of taxes applicable to the services performed under this Agreement and agrees to comply with all federal, state, and local laws regarding the reporting of taxes, maintenance of insurance and records, and all other requirements and obligations imposed on him or her as a result of his or her status as an independent contractor. Consultant is responsible for providing the office space and clerical support necessary for the performance of services under this Agreement. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or for contributing to the state industrial insurance of unemployment compensation programs or otherwise assuming the duties of an employer with respect to the Consultant or any employee of Consultant.

XIV. EXTENT OF AGREEMENT/MODIFICATION

ATTACHMENTS

This Agreement, together with all attachments and addenda, represents the final and completely integrated Agreement between the parties regarding its subject matter and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by written instrument properly signed by both parties.

	XV.	ADDITIONAL WORK	
	connectic contract. suppleme	on with the project other Any such work or ser ental to this contract. Suc	e Consultant perform work or render services in than provided for by the express intent of this vices shall be considered as additional work, h work may include, but shall not be limited to, Additional work shall not proceed unless so
		rized additional work will bental contract between the	e compensated for in accordance with a written Consultant and the City.
IN WITNES below:	SS WHERE	OF, the parties hereto hav	e executed this Agreement on the dates written
CONSULTA	NT:		CITY OF KIRKLAND:
Ву:			By: Marilynne Beard, Deputy City Manager
Date:			Date:

Attachment E: Equipment Specifications and Technical Requirements

<u>Equipment Specifications: (NOTE: the City reserves the right to purchase this off of state contract if it is to our advantage.)</u>

The City standardizes on Cisco network equipment. The following equipment will be priced as part of this project (NOTE: pricing of this equipment is required. If the vendor wishes to submit an alternate proposal in addition to this list, we will take it under consideration):

Cisco Equipment Summary Everest Park

Name	Catalog Num	Vendor	Description	Qty
AIR-CAP1552E- A-K9	AIR- CAP1552E-A- K9	Cisco	802.11N Outdoor Access Point,Ext. Ant.,Uniband,A Reg. Dom.	3
AIR-ANT2547V- N	AIR- ANT2547V-N	Cisco	Cisco Aironet Dual-Band Omnidirectional Antenna	9
AIR-CORD-R3P- 40NA=	AIR-CORD- R3P-40NA=	Cisco	Power cord, 40 ft, North American Plug	2
AIR- ACCPMK1550=	AIR- ACCPMK1550=	Cisco	1550 Pole Mount Bracket Kit	3
GLC-SX-MM-RGD	GLC-SX-MM- RGD	Cisco	1000BASE-SX short wavelength; rugged	1
AIR- PWRINJ1500-2=	AIR- PWRINJ1500- 2=	Cisco	1520/1550 Series Power Injector	1

Cisco Equipment Summary Houghton Beach Park

Name	Catalog Num	Vendor	Description	Qty	
	AIR-		802.11N Outdoor Access		
AIR-CAP1552E-A-K9	CAP1552E-A-	Cisco	Point,Ext. Ant.,Uniband,A Reg.	4	
	К9		Dom.		
AIR-ANT2547V-N	AIR-	Cisco	Cisco Aironet Dual-Band	12	
AIK-AIVI 2547 V-IV	ANT2547V-N	CISCO	Omnidirectional Antenna	12	
AIR-CORD-R3P-40NA=	AIR-CORD-	Cisco	Power cord, 40 ft, North	4	
AIN-COND-N3F-40INA-	R3P-40NA=	CISCO	American Plug	4	
AIR-ACCPMK1550=	AIR-	Cisco	1550 Pole Mount Bracket Kit	4	
AIN-ACCEMINISSU-	ACCPMK1550=	CISCO	1330 Fole Moulit Blacket Kit	4	
GLC-SX-MM-RGD	GLC-SX-MM-	Cisco	1000BASE-SX short	1	
GLC-SX-MM-KGD	RGD	CISCO	wavelength; rugged	1	

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- Qty 1 Cisco WS-C2960X-24TS-L (CISCO 24 Port Switch w/4x1G SFP slots). Must include one year of Cisco SmartNet. Quantity 1.
- Cisco WCL5508. Must include one year of Cisco SmartNet. Quantity 1.
- Cisco ASA5525-K9 or better. Must include one year of Cisco SmartNet. Quantity 1.

Technical Requirements:

Network Design

- 1. Network MUST support both 2.4 GHz and 5 GHz clients simultaneously.
- 2. Coverage area MUST be clearly defined, either via geographic boundaries or via association with a particular location.
- 3. Throughout 90% of the coverage area, network coverage MUST support:
 - a. 10 Mbit/sec download minimum per client (5 GHz client, no contention)
 - b. 5 Mbit/sec upload minimum per client (5 GHz client, no contention)
 - c. Best-effort download / upload (2.4 GHz client)
- 4. Network SHOULD be designed to provide these performance levels for every individual user during normal network use and contention. These levels will vary depending on location and are not specified as part of this standard.
- 5. If using wireless mesh, at least 33% of APs SHOULD have backhaul connections.
- 6. Network MUST NOT provide WEP-encrypted SSIDs

Access Point Features

- 1. AP MUST support 802.11n or newer with the following capabilities:
 - a. 2x2:2 MIMO or greater
 - b. 40 MHz channel support
- 2. AP MUST support WPA2 Enterprise functionality with AES encryption
- 3. AP MUST support multiple SSIDs with independent authentication and bridging settings
 - a. AP MUST support unique .1q VLAN tags per SSID
- 4. AP MUST NOT bridge or route traffic between wireless users
- 5. AP SHOULD prohibit clients from connecting when their signal strength is insufficient to sustain the network performance requirements
 - a. As a baseline, network operator may use -75 dBm as this threshold
- 6. AP SHOULD steer 5 GHz-capable clients to the 5 GHz BSSID
- 7. AP SHOULD utilize Radio Resource Management to ensure optimal transmit power and channel selection between APs on the same network
- 8. AP SHOULD support airtime fairness to ensure a single client does not consume disproportionate airtime.
- 9. AP SHOULD support operation in the 5 GHz DFS channels (52-140)
- 10. AP SHOULD NOT be configured to use DFS channels, pending broader client support

Captive Portal

- 1. Network MUST support the presentation of a "splash page" (a.k.a. "captive portal") to users before they are permitted to access the Internet
- 2. Network MUST redirect all HTTP requests from new users to this captive portal
- 3. Network MUST present terms of service and privacy policy, and request user's acceptance of these terms before allowing arbitrary HTTP traffic without redirection

4. Network MAY cache user information for a period of time, wherein users do not have to re-accept the terms of service.

L2oGRE

- 1. AP MUST support encapsulation of Ethernet frames in arbitrary GRE tunnels
 - a. SoftGRE encapsulation Protocol Type MUST be set to transparent ethernet bridging (P-Type = 0x6558)
 - Checksum, Routing, Key, Sequence number, source-routing and Recursion control flags MUST be set to zero; their corresponding optional fields MUST NOT be present.
- 2. AP MUST support learning GRE tunnel endpoint IP address from DHCP, ACS or an Element Management System
- 3. AP MUST support ingress IP filtering to restrict traffic from unknown sources and these rules MUST be configurable via ACS or an Element Management System.
- 4. AP MUST support multiple public SSIDs mapping to the same GRE tunnel
- 5. Upstream AP MUST support terminating 802.11 and originating 802.3 frames
 - a. AP MUST forward native frames into the GRE tunnel
 - b. AP SHOULD support setting of .1p priority bits in .1q tag in the 802.3 frame. This could be based on static per-SSID configuration. If and when the AP supports WLAN QoS (per 802.1e/WMM), it should provide mapping of traffic classes to .1p bits.
- 6. Downstream AP MUST support decapsulation of GRE
 - a. If .1q tag is present, AP MUST use the .1q VLAN ID to locate the SSID.
 - b. If .1q tag is not present, AP MUST use the 802.3 destination MAC to locate the SSID and associated client.
 - c. AP MUST originate 802.11 frames on the WLAN corresponding to the received and processed GRE payloads
- 7. AP SHOULD support UDP encapsulation of GRE and MUST support GREoIPv6. The AP SHOULD additionally support IPSec/SSL encapsulation of GRE tunnels using PKI authentication.
- 8. AP MUST support TCP MSS adjustment to account for encapsulation overhead and this value MUST be configurable.
- 9. AP MUST support snooping DHCP requests from wireless clients to insert sub-options in option 82. AP MUST transparently forward any other options already present in DHCP.
- 10. AP MUST support inserting information about the AP and SSID (at a minimum, ESSID and SSID-type i.e. "open" or "secure") into option 82 on DHCP messages relayed from wireless stations to DHCP relay agents. Insertion of information MUST be configurable.
- 11. AP MUST support health checks of the GRE endpoint via periodic ICMP echo request (ping) packets.
 - a. Periodicity of the ping packets MUST be configurable.
 - b. If the AP does not receive a response within a configurable amount of time, AP MUST retransmit the request.
 - c. If the AP does not receive a response to a configurable number of consecutive requests, the AP MUST deem the GRE endpoint as unreachable and begin tunneling traffic to the backup GRE endpoint.
 - d. The AP MUST generate this ping packet only if there is no downstream traffic within the health check period configured.

12. AP SHOULD NOT be routed behind a NAPT device.

RADIUS

- 1. AP MUST support authentication to an arbitrary RADIUS server
- 2. AP MUST allow RADIUS authentication via EAP-TTLS, EAP-TLS, EAP-SIM and EAP-AKA
- RADIUS messages MUST be natively routed (NOT tunneled) to the configured AAA server.
- 4. On power-up, AP MUST send a RADIUS "Accounting-ON" packet to the RADIUS server with "called-station-ID", "NAS-IP" and "NAS-ID" attributes set.
- 5. AP MUST include the "Acct-Session-Id" attribute, which must contain a unique Accounting ID to identify a session of a wireless client on the RADIUS server, in accounting messages to the RADIUS server.
- 6. AP MUST send an Accounting-Start to the RADIUS server when the wireless station is successfully authenticated to the RADIUS server and the AP receives an Access-Accept for the station.
- 7. AP MUST send an Accounting-Stop to the RADIUS server when a connection to the wireless station is lost.
- 8. AP MUST support RADIUS Interim-updates and report at the interval specified by Acct-Interim-Interval AVP (per S5.16 of RFC2869) the following metrics:
 - a. Acct-Input-Octets
 - b. Acct-Input-Packets
 - c. Acct-Output-Octets
 - d. Acct-Output-Packets
- 9. AP MUST include RADIUS attributes in authentication and accounting messages as defined in RFC 3580.
- 10. AP MUST implement receiving idle-timeout and session-timeout values in RADIUS Access-Accept as described in RFC 3580, and enforcing these on a per-client basis.
- 11. AP MUST support the MS-MPPESend-Key and MS-MPPE-Recv-Key attributes as defined in RFC 2548 to be used to transport the PMK for WPA2 air-link encryption after EAP authentication success

Attachment F: Fiber Design

Everest Park:

Provide material, personnel, equipment, to install a wireless mesh system along a designed pathway for coverage at Everest Park.

Provide and install approximately 3200ft of 12 strand fiber cable for RAP access from the splice point at Fire Station 22, on PSE poles along 108th Ave. NE/6th Ave. S. to 9th St S. and 8th Ave S. to utility pole midpoint of park and install RAP unit for wireless mesh coverage.

Installation of the aerial pathway from the splice case by FS 22, north on 108th Ave NE/ 6th Ave S, will be over lashed to existing City of Kirkland/LWSD innerduct and on new pole attachments east on 9th St S, north on 8th Ave S. on west side to park.

Provide pole survey information and obtain permits for new pole attachments along 9th St S, and 8th Ave S. from Puget Sound Energy(PSE).

Splice 2 strands of the new 12 strand fiber to the existing 72 strand fiber, at the splice case by FS22. Strand count to be provided.

Terminate the 2 strands of the 12 strand fiber with LC connectors at the wireless mesh end and connect to the mesh unit.

Houghton Beach Park:

Provide material, personnel, equipment, to install a wireless mesh system along a designed pathway for coverage at Houghton Beach Park.

Provide an underground **pathway, trench/bore of a 2" schedule 40 conduit approximately 650ft** from the 25TA in grass area on east side of Lake View Dr. about 200 feet south of NE 59th St, north to NE 59th St then west to Lake WA Blvd. on south side of NE 59th St to the handhole just north of the luminary by the corner of Lake WA Blvd & NE 59th St . This then gives conduit access to the luminaire.

Provide and install approximately 800ft of 12 strand single mode fiber cable along with a tone able mule tape, through the new 2" conduit pathway and into and through the luminary pole to the wireless mesh unit location.

Provide and install a fiber splice case in the 25TA hand hole on Lake View Dr. and splice 2 strands of the new 12 strand fiber to the existing 96 strand fiber. Strand count to be provided.

Terminate the 2 strands of the 12 strand fiber with LC connectors at the wireless mesh end and connect to the mesh unit.

Traffic Control – Permitting:

Provide traffic control and all permits (COK & PSE) as required to complete project.

Attachment G: Placement of Wireless Access Points

Everest Park



	RAP1						
Location:	Everest Park	GPS Coordinates:	47°40'16.50 N 122°11 32.73 W	Street Name:	N/A		
Mount Type:	Tripod	Mount Height:	10'	POE:	N/A		
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g – 16dBm		

RAP/MAP
Network
Backbone:

Coax/Power/
POE Ethernet
N/A
Cable



Notes: This Mesh unit will provide coverage for the surrounding ball fields and bleacher seating. The Mesh unit can be provided power from a POE injector mounted within the building. A Cat6 cable will need to be run from the AC outlets within the interior to the Mesh unit. The fiber will need to be extended from light pole within park to roof of the building. There is currently communication line running from the pole. It's recommended using a non-penetrating roof mount to extend Mesh unit 10' above roof line. This Mesh unit will be tied into City of Kirkland's fiber and extend backbone to other Mesh units.

MAP2						
Location:	Everest Park	GPS Coordinates:	47°40'19.27N 122°11' 34.58 W	Street Name:	N/A	
Mount Type:	Score Board	Mount Height:	20'	POE:	N/A	
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g – 16dBm	

RAP/MAP
Network
Backbone:

Coax/Power/
POE Ethernet
N/A
Cable



Notes: This Mesh unit will provide coverage for the surrounding ball fields and bleacher seating. A 120v dedicated unswitched outlet will need to be supplied by the City of Kirkland within a waterproof electrical enclosure mounted within 40 feet of the MESH unit. This unit could mount on a mast section attached to the score board. The network backbone will be supplied by RAP 1.

MAP3						
Location:	Everest Park	GPS Coordinates:	47° 40.23.14 N 122°11 35.42W	Street Name:	N/A	
Mount Type:	Score Board	Mount Height:	20'	POE:	N/A	
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g – 16dBm	

RAP/MAP Coax/Power/
Network MAP POE Ethernet N/A
Backbone: Cable Distance:



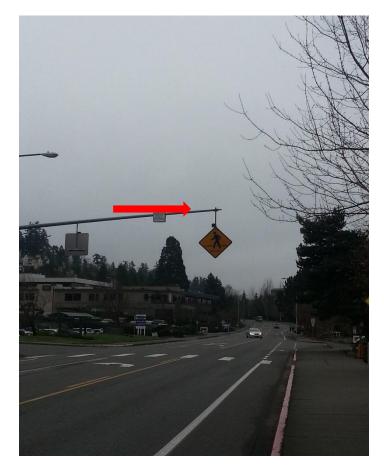
Notes: If additional coverage is needed for the North ball field an additional Mesh unit will required. This Mesh unit will provide coverage for the surrounding ball fields and bleacher seating. A 120v dedicated unswitched outlet will need to be supplied by the City of Kirkland within a waterproof electrical enclosure mounted within 40 feet of the MESH unit. This unit could mount on a mast section attached to the score board. The network backbone will be supplied by MAP 2.

Houghton Beach Park



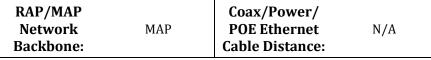
	RAP1						
Location:	Houghton Park	GPS Coordinates:	47°39'37.68N 122°12'22.59W	Street Name:	Lake St		
Mount Type:	Cross Walk Arm	Mount Height:	25'	POE:	N/A		
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g –		

RAP/MAP
Network
RAP
RAP
POE Ethernet
N/A
Cable Distance:



Notes: This Mesh unit will only be used to provide a wireless network backbone to unit #1, 2 & 3. A 120v dedicated unswitched outlet will need to be supplied by the City of Kirkland within a waterproof electrical enclosure mounted within 40 feet of the MESH unit. The unit will need to mount exactly in this location or line of sight will not be achieved between units. If this location is not possible additional units will need to be placed on Lake St to provide backbone to Houghton Park. This unit will get its network backbone from Map 8.

	MAP1						
Location:	Houghton Park	GPS Coordinates:	47°39'39.37N 122°12'25.31W	Street Name:	Lake St		
Mount Type:	Metal Pole	Mount Height:	10'	POE:	N/A		
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g –		





Notes: This Mesh unit will provide coverage for Houghton Park. A 120v dedicated unswitched outlet will need to be supplied by the City of Kirkland within a waterproof electrical enclosure. Aesthetics will be of concern on the park light poles. The installation designs should be approved by an RF engineering prior to final installation. This unit will get its network backbone from RAP 1.

	MAP2						
Location:	Houghton Park	GPS Coordinates:	47°39'36.76N 122°12'25.39W	Street Name:	Lake St		
Mount Type:	Metal Pole	Mount Height:	10'	POE:	N/A		
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g –		

RAP/MAP Coax/Power/
Network MAP POE Ethernet N/A
Backbone: Cable Distance:



Notes: This Mesh unit will provide coverage for Houghton Park. A 120v dedicated unswitched outlet will need to be supplied by the City of Kirkland within a waterproof electrical enclosure. Aesthetics will be of concern on the park light poles. The installation designs should be approved by an RF engineering prior to final installation. This unit will get its network backbone from RAP 1.

	MAP3						
Location:	Houghton Park	GPS Coordinates:	47°39'34.47N 122°12'22.97W	Street Name:	Lake St		
Mount Type:	Concrete Pole	Mount Height:	20'	POE:	N/A		
Antenna Type:	AIR-ANT2547V-N	Power Supply Enclosure:	N/A	Transmit Power:	802.11a – 28dBm 802.11g – 16dBm		

RAP/MAP		Coax/Power/	
Network	MAP	POE Ethernet	N/A
Backbone:		Cable Distance:	



Notes: This Mesh unit will provide coverage for Houghton Beach Park. It's believed it will be required for coverage once all the foliage is back within the park. A 120v dedicated unswitched outlet will need to be supplied by the City of Kirkland within a waterproof electrical enclosure. The street light power tap will be the best option if possible because this is a concrete pole and electrical might not be possible. This unit will get its network backbone from MAP 2.